CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

QC ABSTRACT

NAME OF WORK: Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	Block(400*200*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
7	PCC(M15)	Compressive Strength(7days and 28days)	3 set /16-30 cum	15.84	6	6
8	RCC(M20)	Compressive Strength(7days and 28days)	3 set /16-30 cum	23.15	6	6
9	Mortar Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		Compacted Bulk Density	One Test		1	1
		Loose Bulk Density	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Scanned by TapScanner

10	Plaster Sand	Water Absorption	One Test			
		Specific Gravity	One Test			
		Material finer than 75 micron	One Test			
		SIEVE ANALYSIS	One Test			
11	Structural Steel (Purlin SHS 120x 60 x3.2th)	Weight/Meter	One Test			
		Thickness	One Test			
		Yeild Stress	One Test			
		Tensile Strength	One Test			
		Elongation Percentage	One Test			
		Bend Test	One Test			

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL PRO
CIVIL • STRUCTURAL • GEOTECH • RESEARCH • MATERIALS
BANGALORE

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No : TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2021-11-20-42** **Date: 22-04-21**
Project Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
Agency	:	Sri Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
Customer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
Date of Receipt	:	19-04-21
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11):1988 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5 IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6
Date of test	:	20-04-21
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

SLNo.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.08	–
2	Finess by Air permeablity method (m^2/kg,Min)	298.5	225m^2/kg, Min
3	Density (gm/cc)	3.14	–
4	Standard Consistency (%)	29.5%	Not specified
5	Initial Setting time	145 minutes	Not less than 30 minutes
6	Final Setting time	275 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

ab ID	:	CP-2021-11-20-42 **Date: 18-05-21**
roject Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
gency	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
ustomer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
ate of Receipt	:	19-04-21
ample Type	:	Birla Super 53grade
eference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, Determination of Compressive Strength, Clause 6
ate of test	:	20-04-21
nvironmental Conditions during st	:	Temperature: 26°C Humidity: 72%

Compressive Strength

l.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

The results obtained are satisfactory as per standard requirements.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BP[illegible] Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
8, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-9548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2021-11-20-42** **Date: 22-04-21**
Project Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
Agency	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
Customer's Reference	:	EE(Project) Ynk Zone WO/163/2020-21
Date of Receipt	:	19-04-21
Sample Type	:	40mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	19-04-21

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	189	189	1.3	98.7	90-100
3	20 mm	7284	7473	49.8	50.2	30-70
4	10 mm	4089	11562	77.1	22.9	10-35
5	4.75 mm	3001	14563	97.1	2.9	0-5
6	Pan	437	15000	100.0	0	---

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig. Date. BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER IS/ISO 17025:2017
8, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No. : TC-9848

Format No: CP/TP/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2021-11-20-42 Date: 22-04-21

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.5	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.8	
3	Specific Gravity	2.66	-
4	Bulk Density(Loose) (Kg/l)	1.42	-
5	Bulk Density(Compacted) (Kg/l)	1.48	-
6	Water Absorption(%)	0.21	-

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2021-11-20-42** **Date: 21-04-21**
Project Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
Agency	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
Customer Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
Date of Receipt	:	19-04-21
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	19-04-21

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	199	199	4.0	96.0	90-100
3	10 mm	3050	3249	65.0	35.0	25-55
4	4.75 mm	1502	4751	95.0	5.0	0-10
5	Pan	249	5000	100	0	–

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-11-20-42** **Date: 21-04-21**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.4	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.7	
3	Specific Gravity	2.62	_
4	Bulk Density(Loose) (Kg/l)	1.48	_
5	Bulk Density(Compacted) (Kg/l)	1.55	_
6	Water Absorption(%)	0.27	_
7	Aggregate crushing Value(%)	23.9	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	23.1	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signature
Quality Manager

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Date: 21-04-21

b ID	:	CP-2021-11-20-42
oject Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
gency	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
stomer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
te of Receipt	:	19-04-21
mple Type	:	Fine Aggregate
ference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1, 3) RA2012 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
te of test	:	19-04-21
tal weight taken	:	1000 grams

.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	27	27	2.7	97.3	90-100	90-100	90-100	95-100
3	2.36 mm	55	82	8.2	91.8	60-95	75-100	85-100	95-100
4	1.18 mm	239	321	32.1	67.9	30-70	55-90	75-100	90-100
5	600 micron	205	526	52.6	47.4	15-34	35-59	60-79	80-100
6	300 micron	203	729	72.9	27.1	5-20	8-30	12-40	15-50
7	150 micron	191	920	92.0	8.0	0-10	0-10	0-10	0-15
8	Pan	80	1000	100.0	0.0	---	---	---	---

esult :The tested Sample Conforms to Grading Zone II

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST REPORT OF FINE AGGREGATE

Date: 21-04-21

ID : CP-2021-11-20-42

YSICAL PROPERTIES

no	Tests	Result	Requirements as per IS 383:2016
	Water Absorption(%)	1.5	–
	Specific Gravity	2.59	–
	Material finer than 75 micron(%)	6.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

he results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST RESULTS OF STEEL

: CP-2021-11-20-42 **Date: 20-04-21**

Name : Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05

: Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97

ıer's Reference : EE(Project)/Ynk Zone/WO/163/2020-21

Receipt : 19-04-21

Type : Sunvik

ce to BIS codes : IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012.

test: : 19-04-21

Identification of sample	Grade of the sample	Diameter of the steel bar (mm)	Weight of the sample (kg/m)	Yield stress (N/mm2)	Tensile strength (N/mm2)	Elongation (%)	Bend test	Rebend test
Sunvik	Fe500	8	0.391	512	652	20.0%	Satisfactory	Satisfactory
Sunvik	Fe500	16	1.581	572	674	19.0%	Satisfactory	Satisfactory
Sunvik	Fe500	20	2.476	584	693	19.0%	Satisfactory	Satisfactory

sults obtained are satisfactory as per standard requirements.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

b ID	:	CP-2021-11-20-42 **Date: 30-04-21**
oject Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
gency	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
stomer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
te of Receipt	:	26-04-21
mple Type/Size	:	Solid concrete blocks size (400X200X200)mm
ference to BIS codes	:	IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex - C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
te of test	:	26-04-21

OCK DENSITY:

L No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	399	199	199	15801	33.275	2105.9	2080.6	Not less than 1800Kg/m^3
2	401	199	203	16199	32.994	2036.8		
3	400	198	203	16078	33.749	2099.1		

ATER ABSORPTION:

L No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.91	32.25	4.89	4.25	Shall not be more than 10% by mass
2	33.57	32.14	4.28		
3	33.44	32.24	3.59		

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro
Sig.....
Date.....
BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

ab ID : CP-2021-11-20-42 Date: 30-04-21

MENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	403	202	199	
2	402	199	201	
3	399	201	201	
4	404	201	201	
5	401	201	202	
6	403	200	203	
7	404	201	202	
8	403	202	203	
9	403	201	203	
10	400	201	201	
11	400	200	203	Length : ± 5mm Breadth : ± 3mm Height : ± 3mm
12	402	201	200	
13	403	202	200	
14	399	200	200	
15	402	202	203	
16	403	200	202	
17	401	201	203	
18	403	200	200	
19	400	200	201	
20	400	201	202	
Average of 20	**402**	**201**	**202**	

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Scanned by TapScanner

CIVIL PRO

Sl. No.	Size of cube block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm^2)	(KN)	N/mm^2	(N/mm^2)
1	400	200	80000	435.3	5.4	5.3
2	402	199	80000	431.6	5.4	
3	399	201	80199	427.8	5.3	
4	404	201	81255	437.9	5.4	
5	401	201	80583	440.6	5.5	
6	403	200	80510	410.6	5.1	
7	404	201	80974	420.8	5.2	
8	403	202	81408	419.0	5.1	

per IS Requirements (Table 2, Clause 5.1, 5.2 and 5.4)

Compressive strength		
Grade	Minimum average	Minimum Individual units.
C (5.0)	5.00 N/mm^2	4.00 N/mm^2
C (4.0)	4.00 N/mm^2	3.20 N/mm^2

The Results Obtained are Satisfactory as per Standard Requirements

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig. Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 3/3
****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/2017

TEST REPORT FOR SAND MASONRY MORTARS

ID	:	CP-2021-11-20-42 **Date: 04-05-21**
ect Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
icy	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
omer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
of Receipt	:	01-05-21
ple Type	:	Fine Aggregate, M.Sand for Mortar
rence to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2116-1980 (RA-2007) (Specification for Sand for Masonry Mortars) IS: 2386 :1963(Part - 1, 3) RA2012 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
of test	:	01-05-21
l weight taken	:	1000 grams

no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS: 2116-1980 (RA-2007)
	4.75 mm	0	0	0	100	100
	2.36 mm	85	85	8.5	91.5	90-100
	1.18 mm	200	285	28.5	71.5	70-100
	600 micron	146	431	43.1	56.9	40-100
	300 micron	116.5	547.5	54.8	45.3	5-70
	150 micron	412.5	960	96.0	4.0	0-15
	Pan	40	1000	100.0	0.0	0

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST REPORT FOR SAND MASONRY MORTARS

ID : CP-2021-11-20-42 Date: 04-05-21

SICAL PROPERTIES

	Tests	Result	Requirements as per IS 383:2016
	Water Absorption(%)	3.18	_
	Specific Gravity	2.51	_
	Material finer than 75 micron(%)	12.2	Crushed Fine aggregate Max 15%
	Compacted Bulk Density (Kg/litre)	1.90	_
	Loose Bulk Density (Kg/litre)	1.73	_

results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/2017

TEST REPORT FOR PLASTER SAND

: CP-2021-11-20-42 Date: 05-05-21

Name : Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05

: Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97

er's Reference : EE(Project)/Ynk Zone/WO/163/2020-21

Receipt : 01-05-21

Type : Plaster Sand

nce to BIS codes : IS: 383 : 2016 (Specification for Coarse and fine Aggregates)
IS1542:1992 (Sand for Plaster - Specification)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption

of test : 01-05-21

weight taken : 1000 grams

o	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 1542:1992
	10 mm	0	0	0	100	100
	4.75 mm	35	35	3.5	96.5	95-100
	2.36 mm	15	50	5	95	95-100
4	1.18 mm	50	100	10	90	90-100
5	600 micron	100	200	20	80	80-100
6	300 micron	215	415	41.5	58.5	20-65
7	150 micron	500	915	91.5	8.5	0-15
8	Pan	85	1000	100	0	---

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2021-11-20-42 Date: 05-05-21

PHYSICAL PROPERTIES

SLno	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.8	–
2	Specific Gravity	2.56	–
3	Material finer than 75 micron(%)	8.5	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

)	:	CP-2021-11-20-42 **Date: 12/05/2021**
t Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
y	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
ner's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
f Receipt	:	07-05-21
ner ID	:	PCC For Plinth Area - (Shivaram karanth nagar)
e Type /Size	:	150X150X150 mm
e grade/Age	:	M15 / 7 Days Compressive Strength
nce to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
f test	:	12/05/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
PCC For Plinth Area	M15	05/05/2021	12/05/2021	150.71 X 151.58 X 150.81	22844	**8.405**	289.4	12.7	12.6
PCC For Plinth Area	M15	05/05/2021	12/05/2021	151.92 X 149.50 X 149.56	22712	**8.430**	285.5	12.6	
PCC For Plinth Area	M15	05/05/2021	12/05/2021	149.28 X 150.02 X 151.27	22395	**8.112**	278.2	12.4	

esults obtained are satisfactory as per standard requirements.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

D	:	CP-2021-11-20-42 **Date: 02/06/2021**
ct Name	:	Installation of RO Plant and Drilling Borewells and Accessories in Ward No.05
ss	:	Sri.Santhosh Kumar K R , #04, Samrudhi A V R Block, 1st A main, Virupakshapura, Bangalore-97
omer's Reference	:	EE(Project)/Ynk Zone/WO/163/2020-21
of Receipt	:	07-05-21
omer ID	:	PCC For Plinth Area - (Shivaram karanth nagar)
ple Type /Size	:	150X150X150 mm
ple grade/Age	:	M15 / 28 Days Compressive Strength
rence to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
of test	:	02/06/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
PCC For Plinth Area	M15	05/05/2021	02/06/2021	149.78 X 149.97 X 150.66	22462	**8.618**	399.3	17.8	17.9
PCC For Plinth Area	M15	05/05/2021	02/06/2021	150.14 X 149.45 X 151.55	22438	**8.142**	403.8	18.0	
PCC For Plinth Area	M15	05/05/2021	02/06/2021	150.43 X 150.80 X 150.02	22684	**8.495**	405.8	17.9	

results obtained are satisfactory as per standard requirements.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Scanned by TapScanner